REMARKS

The Office Action dated March 7, 2008, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto. Claims 1, 8, and 14-15 have been amended, and claim 23 has been added, to more particularly point out and distinctly claim the subject matter of the invention. Claims 1-23 are respectfully submitted for consideration.

Claims 1-22 were rejected under 35 U.S.C. 103(a) as being unpatentable over WO 200291785 of Bajko et al. ("Bajko") in view of U.S. Patent Application 7,079,511 of Abrol et al ("Abrol"). The Office Action asserted that although Bajko does not disclose all the features of the claims, Abrol remedies the deficiencies of Bajko. This rejection is respectfully traversed.

Independent claim 1, upon which claims 2-7 are dependent, recites a method that includes detecting that a user equipment has requested a registration to a second serving controller using at least one of a plurality of identities in association with a first serving controller. The plurality of the identities are associated with respective registration statuses selected from a registered status and an unregistered status.

The method includes issuing a registration termination request identifying the at least one of the plurality of identities, which has been newly assigned to the second serving controller as a result of the requested registration. The method includes responsive to the registration termination request, issuing a re-registration notification to the user equipment including the at least one of the plurality of identities which has a

registered status and which was not assigned to the second serving controller as a result of the requested registration. The method includes disassociating all identities of the said user from the first serving controller.

Independent claim 8, upon which claims 9-13 are dependent, recites a system that includes a first serving controller and a user information store configured to hold for a user a plurality of identities in association with the first serving controller. The plurality of identities are associated with respective registration statuses selected from a registered status and an unregistered status.

The system also includes a second serving controller configured to transfer to the user information store a user authentication request identifying the user equipment. The user information store is configured to detect the user authentication request and to insert into a registration termination request issued to the first serving controller each identity of that user equipment, which was newly associated to the second serving controller as a result of the user authentication request. The first serving controller is configured, responsive to the registration termination request, to issue a re-registration notification to the user equipment including each identity which has a registered status and which was not assigned to the second serving controller as a result of the user authentication request, and disassociate all identities of the said user equipment from the first serving controller.

Independent claim 14, upon which claims 15-17 are dependent, recites an apparatus that includes an interface configured to communicate with a user information store, wherein a plurality of identities, each with respective registration statuses, associate

a user equipment with the apparatus and being configured, responsive to a registration termination request received from the user information store, to issue a re-registration notification to the user equipment including each identity which has a registered status and which incorrectly associates the user equipment with the apparatus, and disassociate all identities of the said user equipment from the apparatus.

Independent claim 18, upon which claims 19-22 are dependent, recites a system that includes storing means for storing in a user information store a plurality of identities in association with a first serving controller. The plurality of identities are associated with respective registration statuses selected from a registered status and an unregistered status. The system includes detecting means for detecting that a user equipment has requested a registration to a second serving controller using at least one of said plurality of identities. The system includes issuing means for issuing a registration termination request identifying the at least one of the plurality of identities, which has been newly assigned to the second serving controller as a result of the requested registration.

The system includes notification means for issuing a re-registration notification to the user equipment including the at least one of the plurality of identities which has a registered status and which was not assigned to the second serving controller as a result of the requested registration. The system includes disassociating means for disassociating all identities of the said user equipment from the first serving controller. The notification and disassociating means are responsive to the registration termination request.

As will be discussed below, the combination of Bajko and Abrol fails to disclose or suggest all of the elements of any of the presently pending claims.

Bajko discloses a communication system including a first control entity and a second control entity. A user is provided with at least one registration at the first control entity. The registration of the user at the first entity is transferred to the second control entity in response to another registration of the user at the second control entity. The system may include storage means for storing subscriber information and providing the control entities with subscriber information. An expiry time of a registration of the user or information associated with the status of a registration of the user may also be stored in the storage means. Any of the registrations may expire in response to the expiry of a timer. See abstract of Bajko.

The Office Action has acknowledged that Bajko does not disclose or suggest the features of "responsive to the registration termination request, issuing a re-registration notification to the user including the at least one of the plurality of identities which has a registered status and which was not assigned to the second serving controller as a result of the requested registration, and disassociating all identities of the said user from the first serving controller," as recited in claim 1 and similarly recited in claims 8, 14, and 18.

The Office Action, however, has asserted that these features are taught by Abrol. In particular, the Office Action cited column 12, lines 14 to 42, of Abrol as disclosing the feature of "responsive to the registration termination request, issuing a re-registration notification to the user including the at least one of the plurality of identities which has a

registered status and which was not assigned to the second serving controller as a result of the requested registration, and disassociating all identities of the said user from the first serving controller." Applicants respectfully traverse such contentions made in the Office Action for at least the following reasons.

Abrol relates to a method and apparatus for performing seamless handoff of a mobile station between Radio Access Networks (RANs) that use different types of wireless interfaces. Upon handoff from a first RAN using a first wireless interface to a second RAN using a second wireless interface, an MS determines whether routing ambiguity nay result from the change of RAN and, based on the determination, triggers a re-registration of the network address. A foreign agent (FA) within a packet data serving node (PDSN) monitors network address re-registrations in order to determine whether multiple RAN-PDSN connections are being created for the same MS. Based on this determination the PDSN terminated redundant network connections resulting from movement of the MS between different RANs.

Thus, in the system of Abrol, the MS determines whether any routing ambiguity may exist due to handoffs the system, and (if so) it is the mobile station that triggers a re-registration its network address. This occurs independently of any messages sent by the network, a foreign agent present each PDSN monitors for multiple network connections relating to the same MS and terminates those found to be redundant. The operation of the FA does not rely on any messages between the FA and MS, termination of redundant connections being based on the time a connection was created, *i.e.*, the most recent

connection must be the active one.

Abrol generally relates to the operation of the MS when handing-off. In particular, column 12, lines 14 to 28, of Abrol describe the situation in which the MS moves between different RANs of the same type, as commonly occurs, using the standard protocols for that type of wireless interface. Immediately following, lines 29 to 42 relate to the situation in which an MS moves to a RAN having a different type of wireless interface than the current RAN. In such a situation, it is not possible to provide the required information to the new RAN, as the identifiers, *etc.* currently stored in the MS relate to the previous type of wireless interface. Therefore, the MS must create a new registration with the new RAN. However, this may lead to routing ambiguity for services, as the home agent will continue to send packets addressed to the MS to the previous RAN's PDSN. When the MS determines that it has moved between RANs having different types of wireless interface, and the MS performed a mobile IP-registration the previous RAN type, it re-registers its mobile address in the new RAN.

It is respectfully submitted that there is teaching or suggestion in Abrol of a registration termination request in the passage cited by the Office Action. The only termination of connections taught by Abrol relates to the operation of the foreign agent in terminating redundant connections.

Furthermore, there is no suggestion Abrol that a re-registration notification of any sort should be sent to the mobile station response to any termination request. In fact, termination of connections by the FA is only performed for redundant connections, and

therefore a re-registration must occur before any termination message in order for the connections to be redundant. This re-registration is performed based on a determination made by the MS relating to the wireless interface types of the current and new RANs, and is not based on any re-registration notification received by the MS.

The operation of the MS during the handoff process, is described at column 12, line 43, to column 13, line 47, of Abrol, in conjunction with Figure 6. It is clear from Fig 6 of Abrol and related discussion that the determination of RAN types is made by the MS without requiring re-registration messages from the network. In particular, it is noted that this must be the case (*i.e.* that such a determination must be made), as the new RAN cannot 'know' what the type of a previously connected RAN may have been, and therefore the only entity in the system capable of correctly determining the type of handoff is the MS itself.

Thus, it is respectfully submitted that there is no teaching or suggestion in Abrol of the features of "responsive to the registration termination request, issuing a re-registration notification to the user including the at least one of the plurality of identities which has a registered status and which was not assigned to the second serving controller as a result of the requested registration, and disassociating all identities of the said user from the first sewing controller," as recited in claim 1 and similarly recited in claims 8, 14, and 18. Rather, Abrol teaches separate methods for allowing an MS to determine whether a re-registration is necessary after an handoff between two different RANs, the MS's determination not depending on any re-registration notification, and for terminating

redundant connections for an MS, based on the age of the connection, and not dependent on any messages sent by the MS. Thus, it is submitted that Abrol does not disclose or suggest all of the features of claims 1, 8, 14, and 18. As such, it is respectfully requested that the rejection of claims 1, 8, 14, and 18 be withdrawn.

By providing a method of disassociating all identities of the user from the old serving controller in response to a single message, in certain embodiments of the present invention, the number of messages required to manage the disassociation of redundant identities is reduced. Therefore, the amount of network bandwidth required for management functions of the network is also reduced, leading to improved efficiency in the use of network resources. Thus, certain embodiments of the present invention provide critical and unobvious advantages over the cited art.

In view of the above, the combination of Bajko and Abrol fails to disclose or suggest, at least, "responsive to the registration termination request, issuing a re-registration notification to the user equipment including the at least one of the plurality of identities which has a registered status and which was not assigned to the second serving controller as a result of the requested registration, and disassociating all identities of the said user from the first serving controller," as recited in claim 1 and similarly recited in claims 8, 14, and 18. As such, it is respectfully requested that the rejection of claims 1, 8, 14, and 18 be withdrawn.

Claims 2-7, 9-13, 15-17, and 19-22 are dependent upon claims 1, 8, 14, and 18 and recite further limitations. Thus, claims 2-7, 9-13, 15-17, and 19-22 recite subject

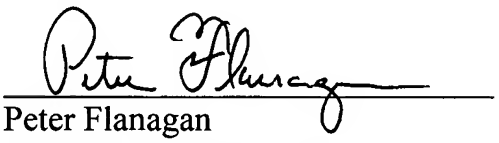
matter that is neither disclosed nor suggested in the cited art. It is, therefore, respectfully requested that claims 2-7, 9-13, 15-17, and 19-22 be allowed.

For the reasons explained above, it is respectfully submitted that each of claims 1-23 recites subject matter that is neither disclosed nor suggested in the cited art. Also, it is respectfully submitted that the subject matter is more than sufficient to render the claimed invention unobvious to a person of ordinary skill in the art. It is, therefore, respectfully requested that all of claims 1-23 be allowed, and that this application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Petition for Extension of Time
Additional Claims Transmittal
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